

160 FA 05 Sec 001

NOTES starting 9/26

TOPICS: Line / trend graphs, rates

1. We are going to compare how PA does relative to the WHOLE US on a variable RELATED TO but not synonymous with drunk driving. The variable is:

2. This variable tells us the number of _____ with BAC above _____ who were INVOLVED in (but did not necessarily _____) a traffic accident where there was a fatality
3. The data source for this variable is the FARS data where FARS stands for _____ Accident Reporting System; it is a system maintained by the FEDS.

For SHORTHAND we will call this variable DDFC – drunk drivers involved in fatal crashes, although the drivers may not have been drunk or even impaired.

4. The drunk driving question, PA vs. US is: _____
5. The trend question, PA vs. US is: _____ -
6. What is the problem with comparing counts (PA vs. US) at one point in time?
7. What is the problem in comparing trends (PA vs. US), based on counts, over time?

DESCRIBE

8. What does Figure 1 tell us? Put simply, is the count trending up over time, trending down, or staying flat?
9. In non-technical terms, how would you explain this figure is showing, to your grandpa?
10. What are the two changing background factors shown in Figure 2?
11. What is their TREND?

MODIFYING VARIABLE SO IT CONTROLS FOR BACKGROUND CHANGES

12. To standardize the count you create a _____

13. By controlling for changes in the background factors we can make _____ comparisons
_____ time

14. The formula for creating an INCIDENCE RATE IS:

15. With the alcohol related fatality incidence rate we can say there were

X MANY _____ WITH ALCOHOL INVOLVED _____ PER 1,000

16. What is the trend shown in Figure 3 for the US?

17. What is the alternative denominator for creating a rate that we will use?

18. This might be better because _____

19. When you construct this second rate using the formula shown immediately below

NUMBER OF FATALITIES WITH
ALCOHOL INVOLVED DRIVERS

=====

LICENSED DRIVERS / 1,000

The rate is now telling you how many _____ took place each year WITH
ALCOHOL INVOLVED DRIVERS PER 1,000 _____

20. What trend is Figure 4 showing you for the US?

21. Figure 5 shows us about how many DDFCs in PA per year in the last ten years?

22. Does figure 5 show you a trend?

23. Does Figure 6 show you an overall trend in terms of PA's population?

24. How would you describe what Figure 7 shows you for PA?

25. Figure 8 shows you a rate using _____ as the denominator

26. Does Figure 8 suggest a trend from 1994 – 2003?
27. Are Figure 7 and 8 showing you the same trend for PA?
28. FIGURE 9: Using _____ (divided by 1,000) as the denominator and comparing PA to the overall US figure and thinking about DDFC as an IMPACT of drunk driving, this figure suggests the IMPACT of drunk driving is _____ in the US compared to PA.
- So which place is “better?”
- Who has the lower rate?
29. FIGURE 9: The IMPACTS OF drunk driving are going _____ in the US while in PA they are going _____ in the last ten years or so
30. FIGURE 9 – Does the Y axis start at zero? IF IT DID how would that change the picture you see?
31. FIGURE 10: Which place is higher on this rate? PA or US?
32. What is the PA trend?
33. What is the US trend?